

4. MEASUREMENT OF NIGHT VISION GOGGLES AND RELATED COMPONENTS

The articles in the present section describe techniques used to measure other NVG parameters, such as gain, field of view, dark spots, distortion, magnification, image rotation, etc. Pinkus & Task (1998) presents the results of an interlaboratory study designed to determine the level of repeatability and reproducibility that can be achieved for measuring the NVIS-weighted transmission coefficient of aircraft transparencies (windscreens and canopies). This article is not about measuring NVGs *per se* but describes a measurement procedure for a component that may significantly impact the performance of NVGs used in aviation.

These articles are reprinted to provide the reader with a reference and background to better understand the measurement of NVGs and related components.

Aleva, D. L., Task, H. L., & Goodyear, C. D. (1998). **Repeatability and reproducibility of NVG gain measurements using the Hoffman ANV-126 test device.** *SAFE Journal*, 28(2), 106-111.

Marasco, P. L., Pinkus, A. R., & Task, H. L. (1998). **Photographic assessment of dark spots in night vision device images.** *Proceedings of the 36th SAFE Association* (pp. 20-25).

Marasco, P. L., & Task, H. L. (1999). **Optical characterization of wide field-of-view night vision devices.** *Proceedings of the 37th SAFE Association*, <http://www.safeassociation.com>

Task, H. L., Hartman, R. T., Marasco, P. L. & Zobel, A. R. (1993). **Methods for measuring characteristics of night vision goggles.** (Report No. AL/CF-TR-1993-0177). Wright-Patterson AFB, Ohio, Armstrong Laboratory. (DTIC No. A277046)

Pinkus, A. R., & Task, H. L. (1998). **Interlaboratory study (ILS) of the standard test method for measuring the night vision goggle-weighted transmissivity of transparent parts.** (Report No. AFRL-HE-WP-TR-1998-0016). Wright-Patterson AFB OH: Air Force Research Laboratory.